

In the Claims

Claims 1-28 (Previously Cancelled)

Claims 29-33(Previously Cancelled)

Claim 34. (Cancelled) A method of treating a subject having autoimmune disease, human T cell leukemia, transplant rejection or graft-versus-host disease, allergies, or infectious disease comprising administering to the subject an effective amount of peptide selected from the group consisting of SEQ ID NO 2, SEQ ID NO 3, SEQ ID NO 4, SEQ ID NO 5, mixtures thereof, and homologues, variants and derivatives of any of these, which exhibit activity the same or similar to EtxB or CtxB, but wherein the peptide does not exhibit GM-1 binding activity.

Claim 35 (cancelled) A method according to claim 34 wherein peptide is SEQ ID NO 2 or a sequence exhibiting 75% homology to SEQ ID NO 2.

Claims 36-49 (Previously Cancelled)

50. (New) A method for treating or preventing autoimmune disease, human T-cell leukemia, transplant rejection or graft-versus-host disease, allergy or an infectious disease in a subject, comprising administering to the subject an effective amount of a peptide which:

- (i) comprises the sequence shown as SEQ ID No. 2; and
- (ii) has fewer than 40 amino acids.

51. (New) The method according to claim 50 wherein the peptide may be further characterized as part of a fusion protein, wherein the peptide acts as an immunomodulator.

52. (New) A method according to claim 50 for treating autoimmune disease, human T-cell leukemia, transplant rejection or graft-versus-host disease or allergy.

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53. (New) A method according to claim 50, wherein the disease is not cholera or enterotoxin-mediated.

54. (New) A method according to claim 50, wherein the peptide comprises the sequence shown in SEQ ID NO 3, SEQ ID NO 4 or SEQ ID NO 5.

55. (New) A method according to claim 1, wherein the peptide is selected from the group consisting of SEQ ID NO 2, SEQ ID NO 3, SEQ ID NO 4 and SEQ ID NO 5.